

PROPOSED REVISIONS TO Chapter 4: ON-ROAD HEAVY-DUTY VEHICLES

Modifications to the Guidelines language are indicated by underlined text. Deletions to the language are indicated by ~~strikeout~~ text. The “*****” indicates the subsequent language in the section does not change.

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A. Projects Eligible for Funding

The Air Resources Board (ARB) has adopted many fleet rules that affect on-road heavy-duty diesel-fueled vehicles (see Section E of this chapter). There are limited funding opportunities for vehicles subject to these rules and regulations.

**Table 4-1
Summary of On-Road Heavy-Duty Funding Opportunities**

Vehicle Type	Subject to ARB Fleet Rule	Moyer Funding Opportunities ¹
Urban Buses	Fleet Rule for Transit Agencies ²	Very limited opportunity
Transit Fleet Vehicles		
Solid Waste Collection Vehicles, excluding transfer trucks	Solid Waste Collection Vehicle Regulation ³	Very limited opportunities for oxides of nitrogen (NOx)
Transport Refrigeration Units (TRU)	TRU Air Toxic Control Measure (ATCM) ⁴	Very limited opportunity
Auxiliary Power Units (APU)	Idling ATCM ⁵	Very limited opportunity; zero emission projects only
Municipal Vehicles and Utility Vehicles	Fleet Rule for Public Agencies and Utilities ⁶	Low-population counties - some opportunity through 2017 High-population counties – very limited opportunity
Drayage Trucks	Drayage Truck Regulation ⁷	Very limited opportunity
Most other On-Road Heavy-Duty Vehicles	Statewide Truck & Bus Regulation ⁸	Limited opportunity <u>for fleets with three vehicles or less</u>

¹ Limited opportunities means a fleet's compliance status with the ARB regulation must be determined. Contact air district Carl Moyer Program staff or consult fleet rule Carl Moyer Implementation Charts at: <http://www.arb.ca.gov/msprog/moyer/guidelines/supplemental-docs.htm> in addition to these guidelines.

² Fleet Rule for Transit Agencies: <http://www.arb.ca.gov/msprog/bus/bus.htm>

³ Solid Waste Collection Vehicle Regulation: <http://www.arb.ca.gov/msprog/SWCV/SWCV.htm>

⁴ TRU Air Toxic Control Measure (ATCM): <http://www.arb.ca.gov/regact/trude03/fro1.doc>

⁵ Idling ATCM: <http://www.arb.ca.gov/regact/hdvide/frorev.pdf>

⁶ Fleet Rule for Public Agencies and Utilities: <http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm>

⁷ Drayage Truck Regulation: <http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm>

⁸ Statewide Truck & Bus Regulation: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>

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Project Types: Taking the above table into consideration, the following categories may be eligible for funding:

1. Truck Replacement Projects (Fleet Modernization and On-Road VIP): The replacement of an older, dirtier truck with a newer, cleaner one. Most funding opportunities for on-road heavy-duty trucks are available for trucks in small fleets of three or fewer trucks through Fleet Modernization or On-Road VIP. The existing engine must be model year 2006 or older. Please see Chapter 5 for Fleet Modernization guidelines or the On-Road VIP Guidelines at www.arb.ca.gov/msprog/moyer/voucher/voucher.htm.

D. Project Criteria

The minimum qualifications for on-road heavy-duty vehicles are listed below. All projects must also conform to the requirements in Chapter 2: General Criteria and in Chapter 3: Program Administration. Participating air districts retain the authority to impose additional requirements in order to address local concerns.

1. General On-Road Heavy-Duty Vehicle Project Criteria

- (B) On-road heavy-duty diesel vehicles with a gross vehicle weight rating (GVWR) between 8,501 and 14,000 pounds may be considered for Carl Moyer Program funding for new purchase, repower and retrofit projects on a case-by-case basis. Prior to submitting a case-by-case request, the district must review the retrofit Executive Order to confirm that the project vehicle meets all the terms and conditions.
- (C) On-road ~~heavy~~ heavy-duty (HHD) vehicles (with GVWR over ~~33,000~~ 14,000 pounds) must be powered by an engine certified to the applicable HHD intended service class as shown on the engine certification Executive Order. However, the following cases may be allowed: ~~Engines certified to the medium heavy-duty (MHD) service class (over 14,000 pounds and up to 33,000 pounds) may not be installed in HHD vehicles. However,~~
 - (1) Medium heavy-duty (MHD) engines may be installed in a heavy heavy-duty (HHD) vehicles with a GVWR up to 39,604 36,300 pounds (20 10 percent higher than 33,000 pounds GVWR) with written warranty verification by the engine and chassis manufacturer. A copy of the written warranty verification must be maintained in the air district project file.

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- (2) Heavy heavy-duty engines may be installed in medium heavy-duty vehicles if necessary for vocational purposes but only if the GVWR are within 10 percent of the HHD intended service class (i.e., GVWR of 29,701 pounds or greater).
- (D) Declaration of Compliance: To receive funding, a fleet owner/operator must be compliant with all federal, state, and local air quality rules and regulations including the Periodic Smoke Inspection Program (PSIP). The application must include a statement of compliance in which the applicant must certify that they are in compliance at the time of application submittal. Districts must also include the following language with a checkbox for the fleet owner/operator to indicate compliance:
I have read and understand that I am responsible for meeting the requirements of the PSIP. I am either currently in compliance with PSIP requirements or I have paid all penalties for non-compliance and continue to meet requirements since payment.

[renumber subsections 1.(D) through 1.(M) to 1.(E) through 1.(N)]

- ~~(F)~~(G) The emission factors in Appendix D, Tables D-3 and D-4 are based on ~~in-use dynamometer testing~~ EMFAC2011 zero-mile based emission factors. Information on EMFAC2011 is available at: <http://www.arb.ca.gov/msei/modeling.htm>. All other on-road emission factors in Appendix D are converted emissions standards based on the engine certification level standards. On-road cost-effectiveness calculations shall use the same quantification methodology for the baseline calculation and the reduced emission calculation.

- (2) Fuel-based calculations must use converted emissions standards for the baseline and reduced emission calculation. Converted emissions standards are found in Appendix D, Tables D-1a, ~~D-1b~~, D-2a, ~~D-2b~~, D-5 and D-6.

- ~~(H)~~(I) The engine model year and applicable emission standard or family emission limit, not the vehicle model year, must be used to determine the appropriate emissions factors.

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2. Compliance Check

After the district receives an application for any on-road project but before contract execution, the district must submit information regarding the project to ARB to check for outstanding violations and previous project funding. The district must also check for compliance with applicable regulations as described below and are not required to validate submitted information and will not be held liable if fleet owners falsify fleet information. All compliance check documentation must be kept in the project file. Air districts are not required.

(A) Districts must submit the following information:

(A) (1) Violations and Previous Project Funding Check: The district shall email its ARB district liaison the registered owner's name, vehicle identification number (VIN), California Highway Patrol number, Department of Transportation number or Interstate Commerce Commission number for each vehicle to be repowered or retrofitted in the project, as well as all other vehicles in the applicant's fleet. Due to the large number of vehicles that could require compliance checks, air districts are encouraged to submit this data as soon as possible after receipt of the application.

(2) Regulations Compliance Check:

a. Vehicles Subject to Statewide Truck and Bus Regulation:

1. If the fleet owner reported in the Truck Regulations Upload and Compliance Reporting System (TRUCRS), districts must keep a copy of the fleet owner's summary report or certificate. The report or certificate must show that the fleet is currently compliant. Other compliance tools issued by ARB may be used to show compliance as they become available.
2. If the fleet owner is not required to report in TRUCRS but is required to take action (e.g., replace or retrofit engines in the fleet), the fleet owner may document compliance by providing one of the following for all vehicles in the fleet:
 - (a) Proof of purchase showing Verified Diesel Emission Control Strategy (VDECS) family name, serial number, VIN, and retrofit installer.
 - (b) Photographs of VDECS labels on engine and retrofit showing family name, serial number, and VIN.
 - (c). Photograph of 2007 or later engine label with VIN.

b. Vehicles Subject to Other On-Road Regulations:

1. If the fleet owner does not have documentation from ARB stating that they are currently in compliance, fleet information must be submitted to ARB to check compliance with the regulations. The fleet information needed for the compliance check may be more than that specified in section D.2.(A)(1) such as engine model year, GVWR, emission control systems, fleet compliance records, etc.

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2. Applicants subject to the Public Agency and Utility Regulation must follow Section A.2. to demonstrate compliance.
3. A regulation index for statewide on-road regulations is available at <http://www.arb.ca.gov/msprog/truckstop/azregs/azregs.htm>

(B) Compliance Check Procedure:

- ~~(B)~~ (1) The liaison will forward ~~that~~ the information electronically to the responsible parties at ARB. The liaison will email the air district the results of the compliance check within 10 business days.
- ~~(C)~~ (2) If the compliance check indicates that the vehicle has already received funding and is still under contract, the air district will be notified and the application must be rejected.
- ~~(D)~~ (3) If the compliance check indicates there is an outstanding violation with any truck in the applicant's fleet or that the fleet is not in compliance with statewide regulations, the air district shall inform the engine owner in writing that no disbursement may be made until the owner provides proof that each violation has been corrected and each fine has been paid and the fleet has been brought into compliance.
- ~~(E)~~ (4) If the outstanding violation is based on problems with the baseline engine (e.g., gross polluter), then a new engine must be installed instead of fixing the old engine. The engine owner must pay the fine for each violation and submit documentation of violation correction with, or before submitting, the invoice.

E. Funding Eligibility for Projects Subject to In-Use Regulations

Most on-road vehicles are subject to an in-use regulation. Funding is available for emissions reductions that are early or extra to regulatory requirements. In addition, fleets that have achieved compliance with the final regulatory deadline may be eligible for funding. Unless otherwise noted, retrofit, repower, TRU, and idling reduction funding is only available to fleets with three or less on-road vehicles with GVWR s over 14,000 pounds. New purchase projects have no fleet size limitation. For detailed information on eligible emission reductions and calculation methodology, please see the 2011 on-road supplemental guidance located at: <http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>.

1. Drayage Trucks

- (A) Current Drayage Trucks: Limited Carl Moyer Program funding is available for the incremental NO_x benefit between 1.20 g/bhp-hr and 0.20 g/bhp-hr

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for all drayage trucks, as defined in California Code of Regulations, title 13, section 2027(c)(15) up to one year before the applicable compliance deadline. For repowers, funding is available for the NO_x and reactive organic gases (ROG) emission reductions between engines certified to a NO_x emissions standard of 1.20 grams per brake horsepower-hour (g/bhp-hr) and 0.20 g/bhp-hr or cleaner. For new purchases, funding is available for the NO_x and ROG emission reductions between engines certified to a NO_x emissions standard of 0.20 g/bhp-hr and a NO_x standard that is at least 30 percent cleaner. There is no final funding date for new purchases. There are no surplus funding opportunities for retrofits. Beginning on January 1, 2023, drayage trucks will be subject to, and must be surplus to, the Statewide Truck and Bus Regulation.

(B) Former Drayage Trucks: The following requirements apply for vehicles that previously operated as a drayage truck, as defined in California Code of Regulations, title 13, section 2027(c)(15):

1. Vehicles that operated one or more times as drayage trucks in the previous two years, but no longer operate as drayage trucks, are not ~~restricted by drayage truck surplus criteria~~ prohibited from receiving Moyer funding.
2. Vehicles that previously operated as drayage trucks must be contractually prohibited from drayage operations that are regulated by California Code of Regulations, title 13, section 2027 throughout the contract term.
3. To help ensure that the replacement vehicle does not operate as a drayage truck during the contract term, the replacement vehicle will be added to the Drayage Truck Registry as non-compliant until the contract end date.

2. Private Fleets (Statewide Truck & Bus Regulation)

For vehicles that are subject to the Statewide Truck & Bus Regulation (Regulation), the following final funding dates apply. Please note that the final funding dates listed may not apply to each project and are provided to give a general timeframe of funding eligibility based on certain compliance dates of the regulation. The actual final funding date for specific projects will vary depending on fleet size, regulatory compliance option, GVWR, engine model year, pollutant type, and other factors.

- (A) Fleet size of 1-3 trucks: Funding for the first, second, and third vehicle must be provided no later than one year before the applicable compliance deadline for each pollutant. The final funding date for PM, NO_x, and ROG is ~~January 1, 2024~~ December 31, 2021.

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**Table 4-4
Final Funding Dates for Fleets of 1-3 Vehicles**

Fleet Type	PM	NOx
1-3 vehicles	<u>1/1/2021</u> <u>12/31/2021</u>	<u>1/1/2021</u> <u>12/31/2021</u>

- (B) ~~Fleet size of 4-10 vehicles: Funding is available for fleets with 4-10 vehicles subject to the Regulation. Funding must be provided no later than three years before the applicable compliance deadline. The final PM funding date for trucks with a GVWR over 26,000 pounds is January 1, 2014, and for trucks from 14,001 through 26,000 pounds the final PM funding date is January 1, 2020. The final NOx funding date is January 1, 2020. Projects that receive funding for retrofits are not eligible for the compliance extension to meet the 2010 model year emission equivalent requirement as described in California Code of Regulations, title 13, sections 2025 (f)(4) and (g)(4).~~

**Table 4-5
Final Funding Dates for Fleets of 4-10 Vehicles**

Fleet Type	GVWR	PM	NOx
4-10 vehicles	over 26,000	1/1/2014	1/1/2020
	14,001 – 26,000	1/1/2020	1/1/2020

- (C) Agricultural Vehicles: Eligibility for agricultural vehicles as defined in California Code of Regulations, title 13, section 2025(d)(6) depends on annual mileage accrual and engine model year. Funding for agricultural vehicle projects must be provided no later than one year before the applicable compliance deadline. The final funding date for PM, NOx, and ROG is January 1, 2020~~December 31, 2021~~.

**Table 4-65
Final Funding Dates for Agricultural Vehicles**

Fleet Type	PM	NOx
Agricultural Fleets	<u>1/1/2020</u> <u>12/31/2021</u>	<u>1/1/2020</u> <u>12/31/2021</u>

- (D) Low-Mileage Work Trucks & Vehicles That Operate Exclusively in NOx Exempt Areas: Trucks following the Low Mileage Work Truck Phase-in Option, as defined in California Code of Regulations, title 13, section 2025(d)(40) (p)(2), are eligible for PM funding through December 31, 2016 and NOx and ROG funding through December 31, 2021. ~~and vehicles that operate exclusively in NOx Exempt areas of the state as defined in California Code of Regulations, title 13, section 2025(d)(46) are eligible for PM funding through January 1, 2014 and NOx funding through January 1, 2020 that are following the compliance option specified in~~

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California Code of Regulations, title 13, section 2025(p)(1) are eligible for PM funding through December 31, 2017 and are eligible for NOx and ROG funding indefinitely. Funding must be provided no later than ~~three~~one years before the applicable compliance deadline. Participant contracts for NOx exempt vehicles must include a provision that requires the vehicle to operate exclusively in NOx exempt areas of the state as defined in California Code of Regulations, title 13, section 2025(d)(4~~5~~6).

**Table 4-76
Final Funding Dates for Low-Mileage Construction Trucks
and Vehicles in NOx Exempt Areas**

Fleet Type	PM	NOx (& ROG)
Low-Mileage Construction and NOx Exempt Vehicles	1/1/2014	1/1/2020
Low-Mileage Work Trucks	<u>12/31/2016</u>	<u>12/31/2021</u>
NOx Exempt Vehicles	<u>12/31/2017</u>	<u>No Final Date</u>

- (E) Log Trucks: Log trucks, as defined in California Code of Regulations, title 13, section 2025(d)(39), are eligible for funding through January 1, 2020 December 31, 2021. Funding for retrofits and repowers for log trucks must be provided no later than ~~three~~one years before the applicable compliance deadline. Funding for new purchases has no final funding date. Eligibility requirements for the replacement of log trucks following the Log Truck Phase-in Option specified in California Code of Regulations, title 13, section 2025(m)(12) are available in the Truck Improvement/Modernization Benefitting Emission Reductions (TIMBER) document at <http://www.arb.ca.gov/msprog/moyer/guidelines/supplemental-docs.htm> or in Chapter 5. Log truck fleets do not have a fleet size eligibility limit for funding. No more than 10 log trucks under common ownership may be funded per year.

3. Public Agency and Utility Fleets

Due to low mileage, public agency and utility vehicle projects are generally eligible only for minimal grant amounts.

- (A) All public agency and utility vehicle projects must submit total fleet compliance records as described in the Fleet Rule for Public Agencies and Utilities showing that the funds will not be used to meet rule requirements.
- (B) Fleets that have achieved all applicable final PM BACT compliance requirements are eligible for ~~NOx and ROG~~ funding for retrofit, projects and NOx and ROG funding for repower, and new purchase projects. New purchase projects have no final funding date. Starting January 1, 2021, private utility vehicles, as defined in California Code of Regulations, title 13,

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section 2025(d)(48), will be subject to the Truck and Bus Regulation. Funding must be provided no later than one year before the applicable compliance deadline.

- (C) Low-Population County fleets must declare with submittal of their application which compliance schedule they will follow. Fleets that follow the compliance path for low population counties have limited PM funding opportunities through December 30~~1~~⁴, 2016~~4~~⁴ with a one three-years surplus lifeperiod. Fleets that follow the accelerated turn-over compliance path have limited PM funding opportunities through December 30~~1~~⁴, 2022~~4~~⁴.

4. School Buses

Public school buses are eligible for Carl Moyer Program funding if they meet the general program criteria above; however, their relatively low annual miles usually allow only for minimal grant amounts. School bus projects do not have a fleet size limit.

- (A) School buses are eligible only for NOx and ROG reductions.
- (B) School bus calculations must use the MHD vehicle emission factors and conversion factors to calculate cost-effectiveness.

5. Solid Waste Collection Vehicles (SWCV)

Solid waste collection vehicles are eligible for limited funding opportunities, but emission benefits are generally low because older vehicles have already been replaced or retrofitted to comply with regulatory requirements.

- (A) SWCV fleets that have achieved compliance with the final regulatory deadline are eligible for NOx and ROG funding.
- (B) Solid waste transfer trucks are subject to the Statewide Truck & Bus Regulation, and must meet applicable eligibility criteria identified above.

6. Transit Vehicles (Urban Buses and Transit Fleet Vehicles)

Transit vehicles are eligible for limited funding opportunities, but emission benefits are generally low because most older vehicles have already been replaced or retrofitted to comply with regulatory requirements. Transit Vehicle projects do not have a fleet size limit.
